Ph.D. Synopsis

"A STUDY OF CONSUMER BEHAVIOR TOWARDS DIGITAL LENDING SYSTEMS IN BANKING"

Synopsis submitted to
Swami Ramanand Teerth Marathwada University, Nanded.

For The Award of the Degree Of
Doctor of Philosophy (Ph.D.)
In The Subject of Management Science
Under Faculty of Commerce and Management.

BY
Santosh Bhagwanrao Rathod

Under Guidance Of
Prof. (Dr).D.M.Khandhare
PROFESSOR
SCHOOL OF COMMERCE AND MANAGEMENT SCIENCE,
SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED.
NANDED 431606 (MS)

March-2022

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1. Introduction:

Reason for choosing the captioned research topic is shift in consumer behaviour from physical banking to mobile banking. Recently study has shown drastic increase in digital online banking by consumers and it will have a major effect on existing banking system.Because of availability and affordability of smartphones, internet connectivity customers are now empowered by way of easy access to information, capability to choose from various options, seeking for quick and seamless services.

FinTech credit refers to credit activity facilitated by electronic platforms. This usually involves borrowers being matched directly with investors, although some platforms use their own balance sheet to lend. FinTech platforms facilitate various forms of credit, including consumer and business lending, lending against real estate, and non-loan debt funding such as invoice financing. There is also variation in the creditor base of FinTech credit platforms: some source funding mostly from retail investors, while others use significant funding from institutional investors, banks and securitisation markets. Banks originate loans for FinTech credit platforms in several jurisdictions.(FSB, 2017)

Digital Creditis defined as loans that are accessed via a digital channel either online, via a mobile device or via a third-party agent that facilitates digital credit processing remotely. Most customer interactions and credit processes are handled remotely, and often completely automatically, including loan applications, approvals, repayments and collections. While digital credit can and many times does utilize conventional credit scoring information, especially in more developed countries, most models in emerging markets and even in some developed markets also use a range of alternative data sources, such as payment information, transactions, e-commerce, search, social network data, voice, airtime, e-money usage and other data that is often processed by computerized algorithms to determine credit eligibility and pricing.(Owens, july 2018)

<u>Digital Lending Lifecycle:</u>

It begins with a user discovering the app and ends with the repayment of the loan. A generic digital lending process goes through the following stages: (RBI, 2021)

1. Lending app discovery and registration
2. Loan application processing
3. User verification

4. Loan disbursement
5. Loan repayment

- Lending app discovery and registration**:**

Users find digital loan apps primarily through online searches on Search Engines and by browsing App Stores for related keywords. And Marketing material distributed by digital lenders via SMS, email, online advertisements (on websites, social media, apps) and messaging platforms (WhatsApp, Telegram), etc. The most commonly searched keywords are: Instant Loan, Personal Loan, Aadhaar Loan, Cash Loan, Mobile Loan. The user then downloads and installs the app from an app store. They register on the lending app using their mobile number and/or email address. The user gives the app the necessary permissions. Based on the permissions requested, the app can access various other apps and services on the user's phone. In this step, it has been observed that many apps request for high-risk permissions

- Loan application processing:

The user fills the application and thereby provides a host of information about himself. Based on these details, the app pulls his credit score, historical banking information, mobile recharge history, etc. from the phone. Each app uses its own proprietary algorithm to score the user based on his creditworthiness and chooses to underwrite the loan.

- User verification:

Based on the underwriting, the app displays the loan options that the user is eligible for. The user chooses the appropriate loan option. The user then verifies his identity and e-signs the loan.

- Loan disbursement:

The loan amount is then credited into the user's account, many times to wallets and sometimes to bank accounts. Many of the apps are found to manage cash disbursement through deemed brokers.

- Loan repayment:

Based on the repayment plan, the user pays back the interest and principal amount in the agreed number of instalments. In case of delay, the LSPs in the business of collection/ recovery step in.

Digital Lending Taxonomy:

Digital Lending						
Lending by regulated financial institutions viz,Banks and NBFC			**Lending by individuals /entities other than banks & NBFC**			
Balance sheet lenders(Banks & NBFC)	**Market place lenders(NBFC-P2P)**	**Hybrid lenders(Balance sheet lenders also participating in market place)**	**Registered money lenders**	**Non-bank financial companies**	**Proxy lenders(corporate cards, buy now pay later)**	**Fringe lenders (illegal lending activities)**
Consumer Lending (B2C)		**Small Business Lending (B2B)**	**Consumer Lending (B2C)**		**Small Business Lending (B2B)**	
Unsecured lending	**Secured lending(e.g. Gold Loans)**	**Invoice discounting ,SME lending,POS based lending**	**Unsecured lending**	**Secured lending(e.g. Gold Loans)**	**Invoice discounting ,SME lending,POS based lending**	

Source: RBI Master circular.

From the digital lending perspectives, digital lending takes two forms, viz. balance sheet lending (BSL) and market place lending (MPL), aka platform lending. The difference between BSL and MPL lies where the lending capital comes from and where the credit risks of such loans reside. Balance Sheet Lenders are in the business of lending who carry the credit risk in their balance sheet and provide capital for such assets and associated credit risk, generated organically or non-organically. Market Place Lenders (MPLs) or Market Place Aggregators (MPAs) are those who essentially perform the role of matching the needs of a lender and borrower without any intention to carry the loans in their balance sheet. While P2P lending in India is a clear example of MPL, many other players who are in the business of originating digital loans, (e.g., MPAs, FinTech platforms or the so called 'neo banks' or BNPL players) with the intention of transferring such digital loans to BSLs, can also be bracketed with MPLs/ MPAs. These categories of market players form part of the broader class of Lending Service Providers (RBI, 2021)

Factors Spurting Growth of Digital Lending in India:

Digital lending is driven by a combination of supply-side and demand-side factors. In India, unmet credit demand of younger cohorts, low financial inclusion, technological advancements and increasing internet penetration are going to be the strong drivers. However, trust in technology, data security and customer protection considerations will play a critical role in determining the extent of FinTech adoption. India accounts for the most number of DLAs in the world. India's vision towards becoming a cash-light economy combined with the growth of public digital infrastructure and the demand for financial inclusiveness makes it a

front runner in the digital lending technology arena. The growth drivers have come both from supply as well as demand side as presented in the following table.

Demand Side	Supply side
Demographics • High proportion of young population. • Digital Natives. **Unmet Demands:** • Low credit penetration to informal economy /subprime /first time borrowers. • Reluctance of traditional banks to lend to small borrowers with low or nil credit history. **Economic Development:** • Increase in per capita GDP at constant prices to 1, 08,620 in (2019-20) to 78,348 (2013-14). • Increase in per capita Net National Income at constant prices to 1, 08,620 in (2019-20) from 68,572 in 2013-14. **Covid 19 Pandemic :** • Pandemic induced financial stress. • Reduced mobility and social distancing.	**Internet /Mobile Penetration:** • Accessibility and availability of smart phones • Internet subscribers (776.45 million as on sept-20) • Mobile connections-1151.73 million • broad band connections-726.32 million **Government Initiatives:** • Jan Dhan Yojana • Aadhar enrolment • Digital India • India stack • Startup Ecosystem. **Technological Advancements:** • Mobile Internet • Application programming Interface (APIs) • Vertical Search Engines • Artificial Intelligence • Big data Analytics • Cloud computing

(Source:(RBI, 2021)**)**

2. Significance of the study:

- This study is useful to incumbent banking, NBFC and FinTech institutions in expanding, modifying, improving and innovating digital lending services to consumersfor transparent and seamless service and experience.
- The study is also useful to policy makers like RBI and government in formulating policies that guide financial industries in the provision of digital services.
- Lastly it will acts as a reference point, a compass to guide other research scholars and institutions who intend carry out studies of the same or related nature.

3. Objective of the study:

1. To study consumer confidence pertaining with security of consumer data in digital lending.

2. To study digital lenders transparency with respect to pricing, interest rates and other loan charges.

3. To study consumers' confidence pertaining with complains resolution mechanism followed by digital lenders.

4. To study level of consumers satisfaction towards loan recovery and settlement procedures followed by digital lenders.

5. To study consumers' confidence with respect to ease of sanction.
6. To study adoption of digital lending products by incumbent banks and financial institutions.
7. Comparative study of Fintech companies (Digital Lending Apps), Incumbent banks and financial institutions with respect with digital lending products and process.
8. To study Applicability of banking regulation norms in digital banking.

4. Hypothesis:

H0: Digital Lending process involves simplified documentation and quick turnaround time from loan application to loan disbursement as compared with conventional physical bank.
H1: Digital Lending process does not involve simplified documentation and quick turnaround time from loan application to loan disbursement as compared with conventional physical bank.

H0: Digital Lending provides transparency with better pricing as compared with conventional physical bank.
H2: Digital Lending does not provide transparency with better pricing as compared with conventional physical bank.

H0: Consumers are satisfied with complain resolution mechanismand loan recovery process as compared with conventional physical banks.
H3: Consumers are not satisfied with complain resolution mechanism and loan recovery process as compared with conventional physical banks.

H0:Consumers prefer incumbent banks over new fintech companies for availing digital loan

H4: Consumers are indifferent towards incumbent banks over new fintech companies for availing digital loan

H0:Fintech companies have better product design and process when compared with incumbent banks and financial institutions.

H5:Fintech companies have better product design and process when compared with incumbent banks and financial institutions.

5. Literature review:

A literature review is a survey of scholarly sources on a specific topic. It provides an overview of current knowledge, allowing you to identify relevant theories, methods, and gaps in the existing research. (McCombes, 2019).

A literature review will give insight on extent of knowledge we have as compare with existing knowledge base which will enable us in finding proper direction to carry out research work.

Good literature shall ensure we critically analyse and not just summarise reviews to get correct picture of our knowledge on subject.

6. Research Methodology:

Research methodology is the heart of research process. Selection of appropriate research methodology depends on clarity we have while defining our research problems, research objectives and hypothesis. More clarity means better selection of RM and thus we can expect better insight into solution towards problems being researched.

For our study under consideration we shall be using qualitative approach as we are seeking to understand consumers changing behaviour towards online banking lending services, problems faced and future challenges, opportunities in digital lending banking.To get information pertaining to their behaviour we shall be seeking qualitative approach. Data collected shall be further coded for analysing and proving our hypothesis. We have defied our sampling techniques, data collection methods and statistical to be used for anlysis.

Sampling Technique and Data Collection:

Sampling technique will be Non probabilistic convenient sampling. As we have to selectively identify consumers who have availed digital loans and observe their experience, behaviour we have to use convenience sampling technique with sampling size restricted to 1000.The samples will be picked from 16 talukas of Nanded region including Nanded city in proportion to the respective population.

Sr.No.	Taluka	Towns & Villages	Population	Literacy	Sex Ratio	% of Population	Sample Size
1	Ardhapur	Towns & Villages	1,09,332.00	64%	932.00	3.25%	34.00
2	Bhokar	Towns & Villages	1,38,313.00	63%	946.00	4.11%	40.00
3	Biloli	Towns & Villages	1,70,159.00	59%	960.00	5.06%	40.00
4	Deglur	Towns & Villages	2,27,862.00	64%	962.00	6.78%	68.00
5	Dharmabad	Towns & Villages	96,776.00	63%	989.00	2.88%	30.00
6	Hadgaon	Towns & Villages	2,59,986.00	65%	938.00	7.73%	80.00
7	Himayatnagar	Towns & Villages	1,09,727.00	62%	948.00	3.26%	32.00
8	Kandhar	Towns & Villages	2,48,870.00	64%	930.00	7.40%	74.00
9	Kinwat	Towns & Villages	2,47,786.00	64%	965.00	7.37%	70.00
10	Loha	Towns & Villages	2,41,885.00	63%	939.00	7.20%	72.00
11	Mahoor	Towns & Villages	99,940.00	66%	942.00	2.97%	30.00
12	Mudkhed	Towns & Villages	1,15,696.00	63%	932.00	3.44%	35.00
13	Mukhed	Towns & Villages	2,93,885.00	63%	936.00	8.74%	90.00
14	Naigaon (Khairgaon)	Towns & Villages	1,82,868.00	63%	947.00	5.44%	55.00
15	Nanded	Towns & Villages	7,19,188.00	73%	928.00	21.40%	220.00
16	Umri	Towns & Villages	99,019.00	61%	960.00	2.95%	30.00
	Total Population		**33,61,292.00**				**1,000.00**

(Source: As per Census 2011)

LIST OF THE BANK'S/NBFC TO BE STUDIED

Sr. No	Name Of Bank's	Name of NBFC
01	Allahabad Bank	Tata capital
02	Andhra Bank	India bulls
03	Bank of India	Bajaj Finserv Limited
04	Canara Bank	L&T Finance
05	ICICI Bank	M & M Financial Services
06	State Bank Of India	Shriram City
07	Kotak Mahindra Bank.	Muthoot Finance Services
08	Bank Of Baroda	
09	Punjab National Bank	
10	Union Bank	

Data Collection:

- **Primary Data:**

As we have to identify consumers who have availed digital loans in past and currently availing, we have to use convenience non probabilistic technique to collect primary data.

Primary Data shall be collected by using multiple data collection techniques like personal interviews, telephonic conversation and through emailing questionnaire to them. These multiple pronged approach towards data collection will ensure effective and accuracy in information being collected.

- **Secondary Data:**

Secondary data is the data that has already been collected through primary sources and made readily available for researchers to use for their own research. It is a type of data that has already been collected in the past. A researcher may have collected the data for a particular

project, and then made it available to be used by another researcher. The data may also have been collected for general use with no specific research purpose like in the case of the national census. Data classified as secondary for particular research may be said to be primary for another research. This is the case when data is being reused; making it primary data for the first research and secondary data for the second research it is being used for.

Statistical tools:

Statistical tools would enable researcher to carry out a research study include planning, designing, collecting data, analysing, drawing meaningful interpretation and reporting of the research findings.

For our study being non probabilistic technique of sampling, statisticaltools like Chi Square can be used for testing of hypothesis.

7. Data analysis and interpretation of data:

Data analysis and interpretation is the process of assigning meaning to the collected information.

The captured data from the qualitative research is presented, analysed, described and interpreted in a systematic manner as the next step of the research process. The documentation and analysis process aimed to present data in an intelligible and interpretable form in order to identify trends and relations in accordance with the research aims.

For Data analysis we shall be using SPSS software and various statistical tools for analysis and interpretation of data.

8. Scope and limitations of study:

The scope of a study explains the extent to which the research area will be explored in the work and specifies the parameters within which the study will be operating.

Under Scope we will have to define what the study is going to cover and what it is focusing on. Similarly, we shall also define what the study is not going to cover. This will come under

1. Scope of study is to identify banking consumers who have availed digital lending facility and study their behaviour towards digital lending services.
2. Identification of consumers shall be restricted to Nanded districts. Samples will be selected from all taluka from Nanded district in proportion to their population.

3. As we have to selectively identify consumers who have availed digital loans and observe their experience we have to use convenience sampling technique with sampling size restricted to 1000.

4. Thus Non probabilistic sampling technique will be most suitable technique for data collection.

5. Corresponding Chi Square technique could be used to test and prove various hypotheses proposed in the thesis.

6. Duration of the study will be completed in two years of time.

9. Chapter plan:

Chapter plan will consist of following chapters:

1. Introduction:

Introduction will give insight about the existing knowledge and trends about the subject supported with proper citations and data. This chapter will also cover in brief what gaps and problems are there in existing subject.

2. Research methodology and review of literature:

Research methodology is the heart of research process. Selection of appropriate research methodology depends on clarity we have while defining our research problems, research objectives and hypothesis. Under this we shall be covering data collection method, Sampling techniques and Statistical tools to be used for our research study.

3. Profile of Banking Consumer on Nanded District: .Researcher will be prepared Profil of Banking Consumer on Nanded District.

4. Data analysis and interpretation of data:

Data analysis and interpretation is the process of assigning meaning to the collected information and determining the conclusions, significance, and implications of the findings.

5. Finding, conclusion and suggestion:

Findings, conclusions, suggestions will be drawn by researcher with the help of collected primary & secondary data and formulated objectives and hypothesis of the study.

Santosh Bhagwanrao Rathod
Researcher

Prof. (Dr.) D.M.Khandare
(Professor & Research Guide)